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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,459	02/07/2002	Gary Lee Butler	12929.1071US01	1822

23552 7590 09/12/2003

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EXAMINER

YEUNG, JAMES C

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 09/12/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,459

Applicant(s)

BUTLER ET AL.

Examiner

James c Yeung

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 and 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: **210, 214, 110, 891, and 892** . Correction is required.

Claim Rejections - 35 U.S.C. § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-7, and 16, are rejected under 35 U.S.C. 102(b) as being anticipate by Tetzner (German Pat. 86 31 526.9, prior art cited by applicant in Paper No. 6). The structure as claimed is fully anticipated by Tetzner. In particular, Tetzner shows in Fig. 3, a mixture fitting (9) for use in a combustion system, the mixture fitting comprising:

a first portion (9a) configured to be coupled to a combustible gas source (7);

a second portion (9b) configured to be coupled to a burner assembly (2), wherein the first and second portions define a gas passage (11); and

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an air orifice (13) defined by the mixture fitting (9) extending from an exposed surface of the mixture fitting (9) to the gas passage (11) and configured to allow primary air to travel through the orifice and into the gas passage (11).

In regard to claim 2, Tetzner shows in Fig. 3 that the air orifice (13) is positioned at an angle in a direction of a flow of combustible gas through the gas passage (11).

In regard to claim 4, Tetzner shows in Fig. 3 the second diameter (d_2) of the second portion (9b) of the gas passage (11) is greater than the first diameter (d_1) of the first portion (9a) of the gas passage (11).

4. Claims 1-4, 6-11, and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipate by Greaves (prior art cited by applicant in Paper No. 6). The structure as claimed is fully anticipated by Greaves (note col. 1, line 27- 49 and col. 2, lines 1-39). In particular, Greave shows in Figs. 1-4, a mixture fitting for use in a combustion system, the mixture fitting comprising:

a first portion (1) configured to be coupled to a combustible gas source;

a second portion (2) configured to be coupled to a burner assembly, wherein the first and second portions define a gas passage (5); and

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an air orifice (3) defined by the mixture fitting extending from an exposed surface of the mixture fitting (9) to the gas passage (5) and configured to allow primary air to travel through the orifice (3) and into the gas passage (5).

5. Claims 1-4, 6-11, and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipate by De Gouville. The structure as claimed is fully anticipated by De Gouville. In particular, De Gouville shows in Figs. 1-4, a mixture fitting for use in a combustion system, the mixture fitting comprising:

a first portion (15) configured to be coupled to a combustible gas source;

a second portion (16) configured to be coupled to a burner assembly (1), wherein the first and second portions define a gas passage (10); and

an air orifice (11) defined by the mixture fitting extending from an exposed surface of the mixture fitting to the gas passage (10) and configured to allow primary air to travel through the orifice (11) and into the gas passage (10).

In regard to claim 8, De Gouville shows in Fig. 1 that the burner assembly includes an air shutter (note col. 3, line 3 - col. 4, line 7).

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6. Claims 1-4, 6-7, and 16 are rejected under 35 U.S.C. 102(b) as being anticipate by Guth (prior art cited by applicant in Paper No. 6). The structure as claimed is fully anticipated by Guth (note: col. 1, line 54 - col. 2, line 15; col. 3, line 63 - col. 4, line 43; and Fig. 1).

7. Claims 1-3, 6, and 16 are rejected under 35 U.S.C. 102(b) as being anticipate by Jeppesen, prior art cited by applicant in Paper No. 6). The structure as claimed is fully anticipated by Jeppesen (note: col. 6, line 29 - line 42; col. 6, line 67 - col. 7, line 14; and Fig. 1).

8. Claims 1-7, and 16 are rejected under 35 U.S.C. 102(b) as being clearly anticipate by Beam. The structure as claimed is fully anticipated Beam (note Fig. 1).

Claim Rejections - 35 U.S.C. § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 12-15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butler (prior art cited by applicant in Paper No. 6) in view of De Gouville.

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Butler discloses the invention substantially as claimed (note col. 3, lines 14 - 28 and/or elements 43 and 35, Fig. 2). However, Butler does not disclose a mixture fitting.

De Gouville shows in Figs. 1-4, a mixture fitting for use in a combustion system, the mixture fitting comprising:

a first portion (15) configured to be coupled to a combustible gas source;

a second portion (16) configured to be coupled to a burner assembly (1), wherein the first and second portions define a gas passage (10); and

an air orifice (11) defined by the mixture fitting extending from an exposed surface of the mixture fitting to the gas passage (10) and configured to allow primary air to travel through the orifice (11) and into the gas passage (10).

This particular arrangement shown by De Gouville is used for the purpose of maximizing the mixture of air with the combustible gas in a combustible gas burner system.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the outlet of the gas supply tube (44, Fig. 2) with a mixture fitting such as taught by Greaves in order to maximize the mixture of air with the combustible gas in the combustible gas burner system.


11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Each of Webster and Chalot (France Pat. 815,408) is cited to show a mixture fitting for a combustible gas system.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James C. Yeung whose telephone number is (703) 308-1047. The facsimile telephone number for this Art Unit is (703) 308-7764.

JY
September 5, 2003


James C. Yeung
Primary Examiner